## ดาดบบบด Modular Production System



- → first full-stack turnkey Modular Production System
- → AI-powered software suite for Modular Production, Warehouse Management and Fleet Management
- → easy and robust integration of arculee and AMRs from different suppliers via standardized open API (VDA5050)
- → open interfaces for seamless integration into the factory's automation infrastructure
- → layout, simulation, optimization and operation across all verticals in greenfield or retrofit settings
- → available as all-around carefree SaaS / RaaS model
- → arculus competence teams for planning, implementation and 24/7 operations control

## arculee

The arculee is an autonomous mobile robot (AMR) that brings the capabilities from self-driving cars and economies from mass production into industrial environments



- → autonomous transport of products and material (payload up to 1.0t)
- → robust localization and navigation based on sensor data fusion
- → in-line charging for maximum utilization
- → available in three sizes
- → logging pipeline and tools for analysis
- → over the air updates and (predictive) maintenance concept
- → CE certification for collaborative environments

## Auto OEM

sanitized

AGVs¹ have been around plants for many years to automate repetitive transportation tasks with basic obstacle detection. Modular production utilizes robots with much higher intelligence, AMRs, that understand their operating environment and navigate dynamically using a map.

arculees are the OEM's preferred choice across plants to perform both simple and the most complex transportation tasks fully autonomously at attractive

> 200,000 AMR km in 2020

Price-competitive to standard AGVs1

**Stress-tested** in complex settings

<sup>1</sup>automated guided vehicle